Welcome to STN International! Enter x:x LOGINID:SSSPTA1623PAZ PASSWORD: TERMINAL (ENTER 1, 2, 3, OR ?):2 Welcome to STN International Web Page URLs for STN Seminar Schedule - N. America NEWS 1 "Ask CAS" for self-help around the clock NEWS BEILSTEIN enhanced with new display and select options, NEWS JUL 12 resulting in a closer connection to BABS IFIPAT/IFIUDB/IFICDB reloaded with new search and display NEWS AUG 02 fields CAplus and CA patent records enhanced with European and Japan NEWS AUG 02 Patent Office Classifications The Analysis Edition of STN Express with Discover! NEWS AUG 02 (Version 7.01 for Windows) now available BIOCOMMERCE: Changes and enhancements to content coverage AUG 27 NEWS . BIOTECHABS/BIOTECHDS: Two new display fields added for legal AUG 27 NEWS status data from INPADOC INPADOC: New family current-awareness alert (SDI) available 9 SEP 01 NEWS New pricing for the Save Answers for SciFinder Wizard within NEWS 10 SEP 01 STN Express with Discover! New display format, HITSTR, available in WPIDS/WPINDEX/WPIX SEP 01 NEWS 11 STANDARDS will no longer be available on STN NEWS 12 SEP 27 SWETSCAN will no longer be available on STN NEWS 13 SEP 27 KOREAPAT now available on STN OCT 28 NEWS 14 OCTOBER 29 CURRENT WINDOWS VERSION IS V7.01A, CURRENT NEWS EXPRESS MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 11 AUGUST 2004 STN Operating Hours Plus Help Desk Availability NEWS HOURS General Internet Information NEWS INTER Welcome Banner and News Items NEWS LOGIN Direct Dial and Telecommunication Network Access to STN NEWS PHONE NEWS WWW CAS World Wide Web Site (general information) Enter NEWS followed by the item number or name to see news on that specific topic. All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties. FILE 'HOME' ENTERED AT 06:49:25 ON 09 NOV 2004 => file req TOTAL SINCE FILE COST IN U.S. DOLLARS SESSION ENTRY

0.21

0.21

FILE 'REGISTRY' ENTERED AT 06:49:51 ON 09 NOV 2004

FULL ESTIMATED COST

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STRUCTURE FILE UPDATES: 7 NOV 2004 HIGHEST RN 776240-21-2 DICTIONARY FILE UPDATES: 7 NOV 2004 HIGHEST RN 776240-21-2

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> logoff hold
COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST

TOTAL
0.63

SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 06:50:18 ON 09 NOV 2004

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1623PAZ

## PASSWORD:

\* \* \* \* \* RECONNECTED TO STN INTERNATIONAL \* \* \* \* \* \* \* SESSION RESUMED IN FILE 'REGISTRY' AT 06:52:58 ON 09 NOV 2004 FILE 'REGISTRY' ENTERED AT 06:52:58 ON 09 NOV 2004 COPYRIGHT (C) 2004 American Chemical Society (ACS)

COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
0.42
0.63

Uploading C:\Examination Auxillary files\10656228\10656228 target compound.str

chain nodes :

2 3 4 5 6 7 8 9 10 18 19 20 21 22 23 24 29 30 31 32 33 34 ring nodes:

1 11 12 13 14 15 16 17 25 26 27 28

chain bonds :

1-2 2-3 3-4 4-5 5-6 5-21 6-7 6-22 7-8 7-24 8-9 8-33 9-10 9-29 10-11 14-19 15-18 18-20 19-34 22-23 29-30 29-31 31-32

ring bonds :

 $1 - 1\overline{3} \quad 1 - 17 \quad 11 - 12 \quad 11 - 28 \quad 12 - 25 \quad 13 - 14 \quad 14 - 15 \quad 15 - 16 \quad 16 - 17 \quad 25 - 26 \quad 26 - 27 \quad 27 - 28$ 

exact/norm bonds :

4-5 5-6 7-8 7-24 8-9 14-19 15-18 19-34 29-30 29-31 31-32

exact bonds :

1-2 2-3 3-4 5-21 6-7 6-22 8-33 9-10 9-29 10-11 18-20 22-23

normalized bonds :

 $1 - 13 \quad 1 - 17 \quad 11 - 12 \quad 11 - 28 \quad 12 - 25 \quad 13 - 14 \quad 14 - 15 \quad 15 - 16 \quad 16 - 17 \quad 25 - 26 \quad 26 - 27 \quad 27 - 28$ 

### Match level :

1:Atom 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS 10:CLASS 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:CLASS 19:CLASS 20:CLASS 21:CLASS 22:CLASS 23:CLASS 24:CLASS 25:Atom 26:Atom 27:Atom 28:Atom 29:CLASS 30:CLASS 31:CLASS 32:CLASS 33:CLASS 34:CLASS

## L1 STRUCTURE UPLOADED

=> d l1 L1 HAS NO ANSWERS L1 STR

Structure attributes must be viewed using STN Express query preparation.

=> search 11 exact full
FULL SEARCH INITIATED 06:53:26 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 13 TO ITERATE

100.0% PROCESSED 13 ITERATIONS

1 ANSWERS

SEARCH TIME: 00.00.01

1 SEA EXA FUL L1

=> d 12

L2

L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN

RN 329326-75-2 REGISTRY

CN L-Phenylalanine, N-[3-(4-hydroxy-3-methoxyphenyl)propyl]-L- $\alpha$ -aspartyl-, 2-methyl ester (9CI) (CA INDEX NAME)

OTHER NAMES:

CN Ararame

FS STEREOSEARCH

MF C24 H30 N2 O7

SR CA

LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

DT.CA CAplus document type: Journal; Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); PRP (Properties); USES (Uses)

RL.NP Roles from non-patents: BIOL (Biological study); PRP (Properties)

Absolute stereochemistry.

MeO (CH<sub>2</sub>)<sub>3</sub> N S Ph 
$$CO_2H$$

# \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

- 3 REFERENCES IN FILE CA (1907 TO DATE)
- 3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> file caplus
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 54.86 55.07

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 06:53:39 ON 09 NOV 2004
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FILE COVERS 1907 - 9 Nov 2004 VOL 141 ISS 20 FILE LAST UPDATED: 8 Nov 2004 (20041108/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

## => d 13 1-3 ti fbib abs

- L3 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Gustatory responses of pigs to sixty compounds tasting sweet to humans
- AN 2002:351144 CAPLUS
- DN 137:336847
- TI Gustatory responses of pigs to sixty compounds tasting sweet to humans
- AU Nofre, C.; Glaser, D.; Tinti, J.-M.; Wanner, M.
- CS Faculty of Medicine of Lyon Laennec, University of Lyon, Lyon, Fr.
- Journal of Animal Physiology and Animal Nutrition (2002), 86(3-4), 90-96 CODEN: JAPNEF; ISSN: 0931-2439
- PB Blackwell Wissenschafts-Verlag GmbH
- DT Journal
- LA English
- The gustatory responses of pigs to 60 compds. perceived as sweet by humans were studied via a semi-quant. behavioral method derived from the Richter two-bottle preference test. Among the 60 compds. tested 35 are effective in pigs, but with an effectiveness much lower in pigs than in humans. Lugduname and carrelame, which are the two most potent sweeteners in humans, are also the most effective compds. in pigs.
- RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L3 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Process for producing aspartyl dipeptide ester derivatives
- AN 2001:833348 CAPLUS
- DN 135:358168
- TI Process for producing aspartyl dipeptide ester derivatives
- IN Kawahara, Shigeru; Nagashima, Kazutaka; Takemoto, Tadashi
- PA Ajinomoto Co., Inc., Japan
- SO PCT Int. Appl., 25 pp.
- CODEN: PIXXD2
- DT Patent
- LA Japanese
- FAN.CNT 1

FAN.	CNT 1 PATENT 1	NO.		KIN	D DATE		i	APPL	ICAT:	ION I	NO.		D	ATE	<b>_</b>
ΡI	WO 2001	 085761	-	A1	2001	1115	Ţ	WO 2	001-	JP34'	79		2	0010	423
	₩:	AE, AG	, AL,	AM,	AT, AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
		CO. CR	. CU.	CZ,	DE, DK,	DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,
		HR. HU	, ID,	IL,	IN, IS,	JP,	KE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	LS,
					MD, MG,										
		RU. SI	SE,	SG,	SI, SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	ŪĠ,	US,	UΖ,
					AM, AZ,										
	RW:				MW, MZ,								ΒE,	CH,	CY,
		DE. DE	. ES.	FI,	FR, GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	BF,
		BJ. CF	, cg,	CI.	CM, GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG		
				•				JP 2	000-	1370	28		A 2	0000	510
	EP 1283	213		A1	2003	0212		EP 2	001-	9220	23		2	0010	423
	R:	AT, BE			DK, ES,									MC,	PT,
					FI, RO,										
		•		•						1370	28		A 2	0000	510
	•						1	WO 2	001-	JP34	79	1	W 2	0010	423
	US 2003	118710		<b>A</b> 1	2003	0626	1	US 2	002-	2868	40		2	0021	104
							JP 2	000-	1370	28		A 2	0000	510	
							1	WO 2	001-	JP34	79		A1 2	0010	423
				147	DDM 12E	250	160								

OS CASREACT 135:358168; MARPAT 135:358168

This document discloses a process for conveniently producing on an industrial scale in high yield N-[N-[3-(phenyl)propyl]-L-α-aspartyl]-L-phenylalanine 1-Me ester derivs., which are expected to be sweeteners, by reductively alkylating aspartame with 3-phenyl-2-propenyl aldehyde derivs. under hydrogen in the presence of a catalyst and a base.

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD

```
ALL CITATIONS AVAILABLE IN THE RE FORMAT
     ANSWER 3 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN
L3
     Process for producing and purifying aspartame derivative as sweetener
TI
     2001:185780 CAPLUS
AN
DN
     134:223039
     Process for producing and purifying aspartame derivative as sweetener
ΤI
     Amino, Yusuke; Yuzawa, Kazuko; Takemoto, Tadashi
IN
     Ajinomoto Co., Inc., Japan
PΑ
     PCT Int. Appl., 39 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     Japanese
FAN.CNT 1
```

	PAT	CENT 1	NO.			KINI	<b>D</b> :	DATE		i	APPL	ICAT	ION I	NO.		]	DATE	
ΡI	WO	2001	0180	34		A1	-	2001	0315	Ĭ	WO 2	000-	JP56	65		:	20000	823
		W:	ΑĒ,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	ВG,	BR,	BY,	ΒZ,	CA	, CH,	CN,
			CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,	GH	, GM,	HR,
		,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	ΚP,	KR,	KZ,	LC,	LK,	LR	, LS,	LT,
			LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PL,	PT	, RO,	RU,
			SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TR,	TT,	TZ,	UΑ,	UG,	US	, UZ,	VN,
												RU,						
		RW:															, CH,	
																SE	, BF,	ВJ,
			CF,	CG,	CI,	CM,	GΑ,	GN,	GW,			NE,						
												999-		-			19990	
	CA	2383	137			AΑ		2001	0315			000-					20000	
																	19990	
												000-					20000	
	AU	2000	0672	73		A5		2001	0410			000-	-				20000	
												999-					19990	
												000-					20000	
	US	2002	1473	61		A1		2002	1010			002-					20020	
												999-					19990	
											–	000-				-	20000	
	US 2004049066					A1		2004	0311			003-					20030	
												999-					19990	
												000-					20000	
											US 2	002-	9150	O <sub>.</sub>		AI :	20020	307

OS CASREACT 134:223039

This document discloses the following: a method for industrially producing N-[N-[3-(3-methoxy-4-hydroxyphenyl)propyl]-L-α-aspartyl]-L-phenylalanine 1-Me ester which is useful as a sweetener, in particular, a process for producing the target compound in a high yield by the reductive alkylation reaction of aspartame with 3-(3-methoxy-4-hydroxyphenyl)propional dehyde or its derivative; a method of effectively purifying the target compound contaminated with impurities invading thereinto at various production stages (involving methods other than the above-described reductive alkylation), more particularly, a method of separating the target compound in the form of highly pure crystals; the crystals;

sweeteners containing the same; and utilization thereof in various products which are to be sweetened.

RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> logoff hold COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	11.17	66.24
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION

SESSION WILL BE HELD FOR 60 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 06:58:39 ON 09 NOV 2004

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Welcome to STN International! Enter x:x

LOGINID: SSSPTA1623PAZ

### PASSWORD:

\* \* \* \* \* RECONNECTED TO STN INTERNATIONAL \* \* \* \* \* \* \* SESSION RESUMED IN FILE 'CAPLUS' AT 06:59:28 ON 09 NOV 2004 FILE 'CAPLUS' ENTERED AT 06:59:28 ON 09 NOV 2004 COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	11.17	66.24
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-2.10	-2.10
=> file reg		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	11.61	66.68
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
·	ENTRY	SESSION
CA SUBSCRIBER PRICE	-2.10	-2.10

FILE 'REGISTRY' ENTERED AT 07:00:06 ON 09 NOV 2004
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STRUCTURE FILE UPDATES: 7 NOV 2004 HIGHEST RN 776240-21-2 DICTIONARY FILE UPDATES: 7 NOV 2004 HIGHEST RN 776240-21-2

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

Please note that search-term pricing does apply when conducting  ${\tt SmartSELECT}$  searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

Uploading C:\Examination Auxillary files\10656228\10656228 target genus.str

chain nodes :

2 3 4 5 6 7 8 9 10 18 19 20 21 22 23 28 29 30 31 32

ring nodes :

1 11 12 13 14 15 16 17 24 25 26 27

chain bonds :

1-2 2-3 3-4 4-5 5-6 5-20 6-7 6-21 7-8 7-23 8-9 8-32 9-10 9-28 10-11

14-19 15-18 21-22 28-29 28-30 30-31

ring bonds :

1-13 1-17 11-12 11-27 12-24 13-14 14-15 15-16 16-17 24-25 25-26 26-27

exact/norm bonds :

4-5 5-6 7-8 7-23 8-9 14-19 15-18 28-29 28-30 30-31

exact bonds :

 $1-2 \quad 2-3 \quad 3-4 \quad 5-20 \quad 6-7 \quad 6-21 \quad 8-32 \quad 9-10 \quad 9-28 \quad 10-11 \quad 21-22$ 

normalized bonds :

 $1-13 \quad 1-17 \quad 11-12 \quad 11-27 \quad 12-24 \quad 13-14 \quad 14-15 \quad 15-16 \quad 16-17 \quad 24-25 \quad 25-26 \quad 26-27$ 

### Match level :

1:Atom 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS 10:CLASS 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:CLASS 19:CLASS 20:CLASS 21:CLASS 22:CLASS 23:CLASS 24:Atom 25:Atom 26:Atom 27:Atom 28:CLASS 29:CLASS 30:CLASS 31:CLASS 32:CLASS

### STRUCTURE UPLOADED

=> d.14 L4 HAS NO ANSWERS L4 STR

Structure attributes must be viewed using STN Express query preparation.

=> search 14 sss sam
SAMPLE SEARCH INITIATED 07:00:38 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 8 TO ITERATE

100.0% PROCESSED

8 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:

ONLINE \*\*COMPLETE\*\*

BATCH

\*\*COMPLETE\*\*
8 TO 329

PROJECTED ITERATIONS: PROJECTED ANSWERS:

0 TO

0

1.5

0 SEA SSS SAM L4

=> search 14 sss full

FULL SEARCH INITIATED 07:00:46 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 231 TO ITERATE

100.0% PROCESSED

231 ITERATIONS

21 ANSWERS

SEARCH TIME: 00.00.01

L6

21 SEA SSS FUL L4

=> d scan

L6 21 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN L-Phenylalanine, N-[3-(4-hydroxy-3-methoxyphenyl)propyl]-L- $\alpha$ -

asparty1- $\alpha$ -methy1-, 2-methyl ester (9CI)

MF C25 H32 N2 O7

Absolute stereochemistry.

MeO 
$$(CH_2)_3$$
  $N$   $S$   $Ph$   $CO_2H$ 

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):5

L6 21 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN L-Phenylalanine, N-[3-(4-hydroxy-3-methoxyphenyl)butyl]-L- $\alpha$ -aspartyl-

, 2-methyl ester (9CI)

MF C25 H32 N2 O7

$$\begin{array}{c} \text{Me} \\ \text{MeO} \\ \text{HO} \\ \end{array}$$

L6 21 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN L-Tyrosine, N-[3-(4-hydroxy-3-methoxyphenyl)butyl]-L- $\alpha$ -aspartyl-,

2-methyl ester (9CI)

MF C25 H32 N2 O8

Absolute stereochemistry.

$$\begin{array}{c|c} & & & \\ & & & \\$$

# \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L6 21 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN L-Phenylalanine, N-[3-(3-hydroxy-4-methoxyphenyl)-3-methylbutyl]-L- $\alpha$ -

aspartyl-, 2-methyl ester (9CI)

MF C26 H34 N2 O7

Absolute stereochemistry.

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L6 21 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN L-Phenylalanine, N-[3-ethyl-3-(4-hydroxy-3-methoxyphenyl)pentyl]-L- $\alpha$ -aspartyl-, 2-methyl ester (9CI)

MF C28 H38 N2 O7

Absolute stereochemistry.

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ \text{MeO} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & &$$

### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L6 21 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN L-Phenylalanine, N-[3-(3-hydroxy-4-methoxyphenyl)-3-methylbutyl]-L- $\alpha$ -aspartyl- $\alpha$ -methyl-, 2-methyl ester (9CI)

MF C27 H36 N2 O7

Absolute stereochemistry.

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

Uploading C:\Examination Auxillary files\10656228\10656228 target genus H restricted.str

chain nodes :

2 3 4 5 6 7 8 9 10 18 19 20 21 22 23 28 29 30 31 32

ring nodes :

14 15 16 17 24 25 26 27 1 11 12 13

chain bonds :

1-2 2-3 3-4 4-5 5-6 5-20 6-7 6-21 7-8 7-23 8-9 8-32 9-10 9-28 10-11

14-19 15-18 21-22 28-29 28-30 30-31

ring bonds :

1-13 1-17 11-12 11-27 12-24 13-14 14-15 15-16 16-17 24-25 25-26 26-27

exact/norm bonds :

4-5 5-6 7-8 7-23 8-9 14-19 15-18 28-29 28-30 30-31

exact bonds :

1-2 2-3 3-4 5-20 6-7 6-21 8-32 9-10 9-28 10-11 21-22

normalized bonds :

1-13 1-17 11-12 11-27 12-24 13-14 14-15 15-16 16-17 24-25 25-26 26-27

Hydrogen count :

2:>= minimum 2 3:>= minimum 2 4:>= minimum 2

Match level :

1:Atom 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS

10:CLASS 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:CLASS 19:CLASS 20:CLASS 21:CLASS 22:CLASS 23:CLASS 24:Atom 25:Atom 26:Atom

27:Atom 28:CLASS 29:CLASS 30:CLASS 31:CLASS 32:CLASS

#### STRUCTURE UPLOADED L7

=> d 17L7 HAS NO ANSWERS L7STR

Structure attributes must be viewed using STN Express query preparation.

=> search 17 sss sam
SAMPLE SEARCH INITIATED 07:02:54 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 8 TO ITERATE

100.0% PROCESSED 8 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 8 TO 329
PROJECTED ANSWERS: 0 TO 0

L8 0 SEA SSS SAM L7

=> search 17 sss full FULL SEARCH INITIATED 07:03:01 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 231 TO ITERATE

100.0% PROCESSED 231 ITERATIONS 10 ANSWERS

SEARCH TIME: 00.00.01

L9 10 SEA SSS FUL L7

=> d scan

L9 10 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN L-Phenylalanine, N-[3-(4-hydroxy-3-methoxyphenyl)propyl]-L- $\alpha$ -aspartyl-, 2-methyl ester (9CI)

MF C24 H30 N2 O7

Absolute stereochemistry.

MeO (CH<sub>2</sub>)<sub>3</sub> N S ph 
$$CO_2H$$

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):10

L9 10 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN L-Phenylalanine, N- $[3-(3,4,5-trihydroxyphenyl)propyl]-L-\alpha-aspartyl-,$ 

2-methyl ester (9CI)

MF C23 H28 N2 O8

L9 10 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN L-Phenylalanine, N-[3-(3,4-dimethoxyphenyl)propyl]-L- $\alpha$ -aspartyl-,

2-methyl ester (9CI)

MF C25 H32 N2 O7

Absolute stereochemistry.

MeO 
$$(CH_2)_3$$
  $N$   $S$   $Ph$   $CO_2H$ 

# \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L9 10 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN L-Phenylalanine, N-[3-(3-hydroxy-4-methoxyphenyl)propyl]-L- $\alpha$ -

aspartyl-α-methyl-, 2-methyl ester (9CI)

MF C25 H32 N2 O7

HO (CH<sub>2</sub>) 3 N S Ph 
$$CO_2H$$

L9 10 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN L-Phenylalanine, N-[3-(2,3,4-trihydroxyphenyl)propyl]-L- $\alpha$ -aspartyl-,

2-methyl ester (9CI) MF C23 H28 N2 O8

Absolute stereochemistry.

OH 
$$CCH_2$$
) 3  $N$   $S$   $Ph$   $CO_2H$ 

## \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L9 10 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN L-Phenylalanine, N-[3-(3-hydroxy-4-methoxyphenyl)propyl]-L- $\alpha$ -

aspartyl-, 2-methyl ester (9CI)

MF C24 H30 N2 O7

CI COM

Absolute stereochemistry.

HO 
$$(CH_2)_3$$
  $H$   $S$   $OMe$   $CO_2H$ 

# \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L9 10 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN L-Phenylalanine, N-[3-(4-hydroxy-3-methoxyphenyl)propyl]-L- $\alpha$ -

aspartyl- $\alpha$ -methyl-, 2-methyl ester (9CI)

MF C25 H32 N2 O7

MeO 
$$(CH_2)_3$$
  $N$   $S$   $Ph$   $CO_2H$ 

L9 10 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN L-Phenylalanine, N-[3-(3,4-dihydroxyphenyl)propyl]-L- $\alpha$ -aspartyl-, 2-methyl ester (9CI)

MF C23 H28 N2 O7

Absolute stereochemistry.

HO (CH<sub>2</sub>) 3 N S Ph 
$$CO_2H$$

# \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L9 10 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN L-Phenylalanine, N-[3-(3-hydroxy-4-methoxyphenyl)propyl]-L- $\alpha$ -aspartyl-, 2-methyl ester, monohydrate (9CI)

MF C24 H30 N2 O7 . H2 O

HO (CH<sub>2</sub>) 3 N S Ph 
$$CO_2H$$

# ● H<sub>2</sub>O

L9 10 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN L-Tyrosine, N-[3-(3-hydroxy-4-methoxyphenyl)propyl]-L- $\alpha$ -aspartyl-,

2-methyl ester (9CI)

MF C24 H30 N2 O8

Absolute stereochemistry.

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

## ALL ANSWERS HAVE BEEN SCANNED

=> file caplus		,
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	312.52	379.20
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-2.10

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FILE COVERS 1907 - 9 Nov 2004 VOL 141 ISS 20 FILE LAST UPDATED: 8 Nov 2004 (20041108/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> 19 L10 12 L9

=> d 110 1-12 ti

- L10 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Sweetener compositions containing aspartyl dipeptide esters, and foods and beverages containing them
- L10 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Gustatory responses of pigs to sixty compounds tasting sweet to humans
- L10 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Process for producing cinnamyl aldehyde derivatives and use thereof as intermediate for aspartame derivative
- L10 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Process for producing aspartyl dipeptide ester derivatives
- L10 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Aspartame derivative crystals
- L10 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Sweetener compositions with high degree of sweetness having improved sweetness, supplements and utilization thereof
- L10 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Sweetener compositions with high degree of sweetness having improved sweetness, supplements and utilization thereof
- L10 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Process for the production of aspartyldipeptide ester derivatives, novel intermediates therefor and process for the production of the intermediates
- L10 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Preparation of aspartyl dipeptides and their use as sweeteners
- L10 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Process for producing and purifying aspartame derivative as sweetener
- L10 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Novel aspartyl dipeptide ester derivatives as sweeteners
- L10 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Preparation of aspartyl dipeptide ester derivatives as sweeteners
- => d l10 1-12 ti fbib abs
- L10 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Sweetener compositions containing aspartyl dipeptide esters, and foods and beverages containing them

```
AN 2004:329965 CAPLUS
```

DN 140:338286

TI Sweetener compositions containing aspartyl dipeptide esters, and foods and beverages containing them

IN Ono, Eriko; Takemoto, Tadashi

PA Ajinomoto Co., Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 2004121222	A2	20040422	JP 2003-152064 JP 2003-152064	20030529 20030529

OS MARPAT 140:338286

GΙ

$$R^{1}$$
  $R^{6}$   $R^{7}$   $CO-NH-CH$   $CH_{2}Ph$   $CH_{2}CO_{2}H$   $CH_{2}CO_{2}H$   $R^{3}$   $R^{4}$ 

Ι

The sweetener compns. contain aspartyl dipeptide esters I [R1-R5 = H, OH, OMe; R6, R7 = H, Me; when R6 and R7 are different substituents, the configuration of the C atom linked to these substituents may be (R)-, (S)-, or (RS)-] or their salts and cyclodextrin. The compns. have high water solubility

L10 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

TI Gustatory responses of pigs to sixty compounds tasting sweet to humans

AN 2002:351144 CAPLUS

DN 137:336847

TI Gustatory responses of pigs to sixty compounds tasting sweet to humans

AU Nofre, C.; Glaser, D.; Tinti, J.-M.; Wanner, M.

CS Faculty of Medicine of Lyon Laennec, University of Lyon, Lyon, Fr.

Journal of Animal Physiology and Animal Nutrition (2002), 86(3-4), 90-96 CODEN: JAPNEF; ISSN: 0931-2439

PB Blackwell Wissenschafts-Verlag GmbH

DT Journal

LA English

The gustatory responses of pigs to 60 compds. perceived as sweet by humans were studied via a semi-quant. behavioral method derived from the Richter two-bottle preference test. Among the 60 compds. tested 35 are effective in pigs, but with an effectiveness much lower in pigs than in humans. Lugduname and carrelame, which are the two most potent sweeteners in humans, are also the most effective compds. in pigs.

RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

TI Process for producing cinnamyl aldehyde derivatives and use thereof as intermediate for aspartame derivative

AN 2001:851092 CAPLUS

DN 135:371997

TI Process for producing cinnamyl aldehyde derivatives and use thereof as

intermediate for aspartame derivative

Mori, Kenichi; Fujita, Shinji; Funakoshi, Nao; Takemoto, Tadashi IN

Ajinomoto Co., Inc., Japan PΑ

PCT Int. Appl., 29 pp. SO

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.																			
	PAT	ENT I	. O <i>l</i> .							i	APPL	ICAT:	ION 1	. O <i>l</i>	•	D	ATE		
				<del>-</del>			-									-			
ΡI	WO	2001	0878	13		A1		2001	1122	1	WO 2	001-	JP354	45		2	00104	124	
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			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	
			HR,	HU,	ID,	ΙL,	IN,	IS,	JP,	KΕ,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	
			LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	ΝZ,	PL,	PT,	RO,	
			RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	
			VN,	YU,	ZA,	ZW,	AM,	AZ,	BY,	KG,	KZ,	MD,	RU,	ТJ,	$\mathbf{TM}$				
		RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AΤ,	BE,	CH,	CY,	
																	TR,		
												MR,							
				-	•												0000!	516	
	EΡ	1283	197			A1		2003	0212		EP 2	001-	9220	73		2	00104	424	
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
								RO,											
			•	•		•	-					000-	1428	11	i	A 2	0000	516	
										1	WO 2	001-	JP35	45	1	W 2	00104	424	
	US	2003	1630	04		A1		2003	0828	•	US 2	002-	2959	97		2	0021	118	
											JP 2	000-	1428	11		A 2	0000	516	
											WO 2	001-	JP35	45		A1 2	0010	424	

CASREACT 135:371997; MARPAT 135:371997 os GΙ

$$\begin{array}{c|c} & & & \\ & & & \\ N & & \\ N & & \\ R & & \\ OH & & \\ \end{array}$$

Described is an industrial process for conveniently and efficiently AΒ producing highly pure cinnamyl aldehyde derivs. (I; R = H, C1-4 alkyl or alkoxy) such as (2E)-(3-hydroxy-4-methoxy)cinnamyl aldehyde which comprises reacting a benzaldehyde derivative (II; R = same as above) (for example, isovanillin) with acetaldehyde in the presence of an alkali, preferably adding acetaldehyde in portions in an aqueous solution at a low temperature

The cinnamyl aldehyde derivs. (I) thus obtained are selectively reduced into 3-(3-hydroxy-4-substituted phenyl)propionaldehydes (III; R = same as above). These compds. III are further subjected to reductive alkylation with aspartame to efficiently give N-[N-[3-(3-hydroxy-4-substituted

IV

phenyl)propyl]-L- $\alpha$ -aspartyl]-L-phenylalanine 1-Me esters (IV; R = H, C1-4 alkyl or alkoxy), which are useful as sweeteners with high sweetness. Thus, 121.72 g isovanillin and 320 g NaOH were dissolved in 2,000 mL H2O and cooled to -10°, followed by continuously adding 290 g 28 weight% aqueous acetaldehyde over a period of 45 h, and the resulting mixture was stirred for 1 h, treated with 768.1 g 36 weight% aqueous HCl, and filtered to give 324 g crystalline product. The latter product was dispersed in 500 mL  ${\rm H2O}$ at 25°, treated with 97.5 g 25 weight% aqueous NaOH for dissoln., stirred with 4 q activated charcoal and 16 g celite, and filtered. The filtrate was neutralized with 55.4 g 36 weight% aqueous HCl to give 185.5 g crystalline product

which was vacuum-dried, dispersed in 275 mL MeOH at 60°, stirred for 2 h, cooled to room temperature, and filtered to give, after drying the wet crystals, 83.2 g (2E)-3-hydroxy-4-methoxycinnamaldehyde (98% purity) in 57% yield. The latter compound (5.00 g) and 300 mg 5% Pd-Al203 were added to 80 mL MeOH and stirred under H atmospheric at 35° for 24 h, followed by filtration for removal of the catalyst and washing the catalyst with 10 mL MeOH, to give a MeOH solution of 3-(3-hydroxy-4-methoxyphenyl)propionaldehyde (87% yield). The latter solution (8.15 g) containing 1.50 g of the aldehyde

and

2.57 g aspartame were added to a 4:1 mixture of MeOH and H2O, followed by adding 0.7 g 10% Pd-C containing 50% H2O, and the resulting mixture was stirred at 35° under H atmospheric for 48 h to give 71% N-[N-[3-(3-hydroxy-4methoxyphenyl)propyl]-L- $\alpha$ -aspartyl]-L-phenylalanine 1-Me ester.

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 5 ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
ANSWER 4 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN
L10
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Process for producing aspartyl dipeptide ester derivatives TI

2001:833348 CAPLUS AN

DN135:358168

Process for producing aspartyl dipeptide ester derivatives TI

Kawahara, Shigeru; Nagashima, Kazutaka; Takemoto, Tadashi IN

Ajinomoto Co., Inc., Japan PA

PCT Int. Appl., 25 pp. SO

CODEN: PIXXD2

DT Patent

LAJapanese

FAN.	CNT 1	1				D.2.000
	PATENT	NO.		DATE	APPLICATION NO.	DATE
PΙ					WO 2001-JP3479	
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					DZ, EE, ES, FI, GB,	
		HR, HU,	[D, IL, II	N, IS, JP,	KE, KG, KP, KR, KZ,	LC, LK, LR, LS,
		LT, LU,	LV, MA, MI	D, MG, MK,	MN, MW, MX, MZ, NO,	NZ, PL, PT, RO,
		RU, SD,	SE, SG, Si	I, SK, SL,	TJ, TM, TR, TT, TZ,	UA, UG, US, UZ,
					KG, KZ, MD, RU, TJ,	
	RW:	GH, GM,	KE, LS, M	W, MZ, SD,	SL, SZ, TZ, UG, ZW,	AT, BE, CH, CY,
					IE, IT, LU, MC, NL,	
		BJ, CF,	CG, CI, C	M, GA, GN,	GW, ML, MR, NE, SN,	TD, TG
					JP 2000-137028	A 20000510
	EP 1283	213	A1	20030212	EP 2001-922023	20010423
	R:	AT, BE,	CH, DE, DI	K, ES, FR,	GB, GR, IT, LI, LU,	NL, SE, MC, PT,
					CY, AL, TR	
		•			JP 2000-137028	A 20000510
					WO 2001-JP3479	W 20010423
	US 2003	118710	A1	20030626	US 2002-286840	20021104
					JP 2000-137028	A 20000510
					WO 2001-JP3479	A1 20010423
					1.60	

CASREACT 135:358168; MARPAT 135:358168 OS

This document discloses a process for conveniently producing on an AΒ industrial scale in high yield N-[N-[3-(phenyl)propyl]-L- $\alpha$ -aspartyl]-L-phenylalanine 1-Me ester derivs., which are expected to be sweeteners, by reductively alkylating aspartame with 3-phenyl-2-propenyl aldehyde

derivs. under hydrogen in the presence of a catalyst and a base.

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

TI Aspartame derivative crystals

AN 2001:489419 CAPLUS

DN 135:60486
```

TI Aspartame derivative crystals IN Nagashima, Kazutaka; Aoki, Yuuichi; Ono, Eriko; Takemoto, Tadashi

PA Ajinomoto Co., Inc., Japan

SO PCT Int. Appl., 29 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

FAN.		1 FENT 1	NO.			KINI					APPI	ICAT	ION 1	NO.		I	DATE	
ΡI	WO	2001	04794	49					0705		WO 2	2000-	JP92	47		2	20001	225
												BG,					CH,	CN,
			CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,
			HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KΡ,	KR,	KΖ,	LC,	LK,	LR	LS,	LT,
			LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	ΝZ,	PL,	PT	RO,	RU,
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												LU,					TR,	BF,
			ВJ,	CF,	CG,	CI,	CM,	GA,	GN,			MR,						
												L999-						
	AU	2001	0222	59		Α5		2001	0709			2001-					20001	
												L999-						
												2000-						
	EP	1245	573			A1		2002	1002		EP 2	2000-	9858	95		:	20001	
		R:										IT,	LI,	LU,	ΝL,	SE	, MC,	PT,
			ΙE,	SI,	LT,	LV,	FΙ,	RO,	MK,	CY,						_		
												1999-					19991	
٠.												2000-					20001	
,	BR	2000	0163	16		Α		2002	1203			2000-					20001	
												1999-					19991	
												2000-					20001	
	RU	2222	544			C1		2004	0127			2002-					20001	
												1999-					19991	
												2000-					20001	
	US	2003	0090	50		A1		2003	0109			2002-					20020	
											-	1999-					19991	
											WO 2	2000-	JP92	47		AL :	20001	225

Com. favorable crystals of N-[N-[3-(3-hydroxy-4-methoxyphenyl)propyl]-L- $\alpha$ -aspartyl]-L-phenylalanine-Me ester (I) were given. Compared to amorphous aspartame, I have better stability, and higher purity and sweetness. Physicochem. characteristics of the I crystals were also given.

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

TI Sweetener compositions with high degree of sweetness having improved sweetness, supplements and utilization thereof

AN 2001:265445 CAPLUS

DN 134:265559

TI Sweetener compositions with high degree of sweetness having improved sweetness, supplements and utilization thereof

IN Ishii, Shoichi

PA Ajinomoto Co., Inc., Japan

SO PCT Int. Appl., 50 pp.

CODEN: PIXXD2

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DT
     Patent
LA
     Japanese
FAN.CNT 1
                                              APPLICATION NO.
                          KIND DATE
     PATENT NO.
                                                ----
                                   _ _ _ _ _ _ _
                                   20010412 WO 2000-JP6629
                                                                       20000926
     WO 2001025263
                           A1
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         EV, FIA, FID, FIG, FIK, FIN, FIW, FIX, FIZ, NO, NZ, FL, FT, RO, RO, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                                JP 1999-284344
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                            A2
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     BR 2000014492
                                                JP 1999-284344
                                                                    A 19991005
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                                                                    W 20000926
                                                US 2002-115937
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                                   20030306
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                           B2
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                                                JP 1999-284344
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                                                                    A 19991005
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                                                                      A1 20000926
OS
     MARPAT 134:265559
     Sweetener compns. similar to sucrose are obtained by blending aspartyl
AΒ
      dipeptide ester derivs. (I, Markush structure claimed) such as
     N-[N-[3-(3-hydroxy-4-methoxyphenyl)propyl]-L-\alpha-aspartyl]-L-
     phenylalanine 1-Me ester with at least one compound selected from the group
      comprising saccharides and sugar alcs., in the form of solns. These
      derivs. I are added to improve the taste of beverages.
               THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 4
               ALL CITATIONS AVAILABLE IN THE RE FORMAT
     ANSWER 7 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN
L10
      Sweetener compositions with high degree of sweetness having improved
TI
      sweetness, supplements and utilization thereof
      2001:265444 CAPLUS
AN
      134:265558
DN
      Sweetener compositions with high degree of sweetness having improved
TI
      sweetness, supplements and utilization thereof
      Ishii, Shoichi
IN
      Ajinomoto Co., Inc., Japan
PA
      PCT Int. Appl., 86 pp.
SO
      CODEN: PIXXD2
DТ
      Patent
      Japanese
LA
FAN.CNT 1
                          KIND DATE
                                               APPLICATION NO.
                                                                         DATE
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                                                _____
                          ____
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A1 20010412 WO 2000-JP6628

WO 2001025262

PΤ

20000926

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                                                             A 19991005
                                        WO 2000-JP6628
                                                             W 20000926
                                        US 2002-115242
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US 2003059511
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                     Α1
                            20031125
US 6652901
                     B2
                                                             A 19991004
                                        JP 1999-283505
                                        JP 1999-283506
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                                        JP 1999-284346
                                                            A 19991005
                                        WO 2000-JP6628
                                                            A1 20000926
                                        US 2003-617654
                                                                20030714
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US 2004105928
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                                                             A 19991004
                                        JP 1999-283505
                                        JP 1999-283506
                                                            A 19991004
                                                            A 19991005
                                        JP 1999-284346
                                                            A1 20000926
                                        WO 2000-JP6628
                                                             A3 20020404
                                        US 2002-115242
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OS MARPAT 134:265558

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

AB Sweetener compns. similar to sucrose are obtained by blending aspartyl dipeptide ester derivs. (I, Markush structure claimed) such as N-[N-[3-(3-hydroxy-4-methoxyphenyl)propyl]-L-<a-aspartyl]-L-phenylalanine 1-Me ester with at least one compound selected from the group comprising aspartame, saccharides, sugar alcs. and oligosaccharides, so as to enhance the taste of I. These derivs. I are added to improve the taste of beverages and pharmaceuticals.

TI Process for the production of aspartyldipeptide ester derivatives, novel intermediates therefor and process for the production of the intermediates

AN 2001:265443 CAPLUS

DN 134:281142

TI Process for the production of aspartyldipeptide ester derivatives, novel intermediates therefor and process for the production of the intermediates IN Nagashima, Kazutaka; Aoki, Yuuichi; Takemoto, Tadashi; Amino, Yusuke;

Funakoshi, Nao; Ono, Eriko
PA Ajinomoto Co., Inc., Japan
SO PCT Int. Appl., 39 pp.
CODEN: PIXXD2
DT Patent
LA Japanese

FAN.CNT 1 DATE KIND DATE APPLICATION NO. PATENT NO. \_\_\_\_\_\_ 20000926 A1 20010412 WO 2000-JP6626 WO 2001025260 PT W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG JP 1999-287398 19991007 A 19991227 JP 1999-371284 AU 2000073219 Α5 20010510 AU 2000-73219 20000926 JP 1999-287398 A 19991007 JP 1999-371284 A 19991227 WO 2000-JP6626 20000926 EP 2000-961237 20000926 Α1 20020814 EP 1231215 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL JP 1999-287398 A 19991007 JP 1999-371284 A 19991227 WO 2000-JP6626 20000926 US 2002-117196 20020408 US 2002133037 **A**1 20020919 US 6794531 B2 20040921 JP 1999-287398 A 19991007 JP 1999-371284 A 19991227 WO 2000-JP6626 A1 20000926 US 2004-796093 20040310 20040909 US 2004176472 A1 JP 1999-287398 A 19991007 JP 1999-371284 A 19991227 WO 2000-JP6626 A1 20000926 US 2002-177196 A1 20020621

$$R^{2}$$
 $R^{3}$ 
 $R^{4}$ 
 $R^{5}$ 
 $CO_{2}H$ 
 $O$ 
 $Ph$ 

CASREACT 134:281142; MARPAT 134:281142

GΙ

$$R^2$$
  $R^1$   $R^2$   $R^1$   $R^3$   $CH=CHCHO$   $R^4$   $R^5$  III

Industrial and efficient processes for producing aspartyldipeptide ester ABderivs. of general formula (I; R1-R5 = H, OH, C1-3 alkoxy, C1-3 alkyl, benzyloxy, C2-3 hydroxyalkyloxy; or R1 and R2 or R2 and R3 together represents methylenedioxy), which are expected to serve as sweetener (no data), comprise reductive alkylation of aspartame with propionaldehydes or cinnamaldehydes of general formulas (II) and (III) in the presence of a catalyst. Particularly, described are an industrial and efficient process for producing N-[N-[3-(3-hydroxy-4-methoxyphenyl)propyl]-L-aspartyl]-Lphenylalanine 1-Me ester (IV) which is excellent as high sweetener; useful and advantageous intermediates for the process; and efficient processes for producing the intermediates. Thus, 5.89 g aspartame and 3.42 g 3-(3-hydroxy-4-methoxyphenyl)propionaldehyde (preparation given) were added to 200 mL 80% aqueous methanol, stirred at 40° for a while, and hydrogenated in the presence of 1.78 10% Pd-C at 0.1 M Pa and 40° for 40 h to give 78.9% IV.

RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

TI Preparation of aspartyl dipeptides and their use as sweeteners

AN 2001:252943 CAPLUS

DN 134:266568

TI Preparation of aspartyl dipeptides and their use as sweeteners

IN Amino, Yusuke; Takemoto, Tadashi; Yuzawa, Kazuko; Nakamura, Ryoichiro

PA Ajinomoto Co., Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

r AIN .	-	ENT I	NO.			KINI		DATE				ICAT.				D -	ATE	- <i></i>
ΡI		2001				A2		2001									9991	
	WO	2001	0252	61		AΙ												
		W:	ΑE,	ΑG,	ΑL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	ВG,	BR,	BY,	вz,	CA,	CH,	CN,
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			HU.	ID.	IL,	IN,	IS,	KΕ,	KG,	KΡ,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,
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			CF,	CG,	CI,	CM,	GΑ,	GN,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG			
			•	•	•						JP 1	999-	2819	20		A 1	9991	001
	ΔII	2000	0732	20		A5		2001	0510		AU 2	000-	7322	0		2	20000	926
	110	2000									JP 1	999-	2819	20		A 1	19991	001
											WO 2	000-	JP66	27	1	W 2	20000	926
	HS	2003	0652	10		A1		2003	0403		US 2	002-	1097	19		2	20020	401
		6649				B2		2003	1118									
	US	0049	/04			12		2005	10		JP 1	999-	2819	20		A 1	L9991	001
																	20000	

MARPAT 134:266568

OS GI

Title dipeptides I (R1-R5 = H, OH;  $\geq 2$  of R1-R5 = OH; R6, R7 = H, C1-3 alkyl) or their salts are prepared Thus,  $\beta$ -O-benzyl-L- $\alpha$ -aspartyl-L-phenylalanine Me ester was treated with 3-(2,4-dibenzyloxyphenyl)-2-propenylaldehyde in the presence of NaB(OAc)3H in AcOH to give N-[N-[3-(2,4-dibenzyloxyphenyl)-2-propenyl]- $\beta$ -O-benzyl-L- $\alpha$ -aspartyl]-L-phenylalanine 1-Me ester, which was hydrogenated over Pd/C to afford I (R1 = R3 = OH, R2 = R4 = R5-R7 = H). The product tasted 10,000 times sweeter than sucrose.

L10 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

TI Process for producing and purifying aspartame derivative as sweetener

AN 2001:185780 CAPLUS

DN 134:223039

TI Process for producing and purifying aspartame derivative as sweetener

IN Amino, Yusuke; Yuzawa, Kazuko; Takemoto, Tadashi

PA Ajinomoto Co., Inc., Japan

SO PCT Int. Appl., 39 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

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	PAT	ENT 1	. OI					DATE			APP:	LICAT	ION 1	NO.			DATE	
ΡI	 ₩O	20010	01801	34		 A1		2001	0315	1	WO :	2000-	JP56	65			20000	823
1.1		W:	AE,	AG,	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	вв	, BG,	BR,	BY,	ΒZ,	CA	, CH,	CN,
			CR,	CU,	CZ,	DE,	DK,	DM,	DΖ,	EE,	ES	, FI,	GB,	GD,	GE,	GH	, GM,	HR,
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			LU.	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MΧ	, MZ,	NO,	NZ,	$\mathtt{PL}$ ,	PT	, RO,	RU,
			SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR	, TT,	TZ,	UA,	UG,	US	, UZ,	VN,
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			DE,	DK,	ĒS,	FI,	FR,	GB,	GR,	ΙE,	IT	, LU,	MC,	NL,	PT,	SE	, BF,	BJ,
			CF,	CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR	, NE,	SN,	TD,	TG	7	10000	007
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	CA	2383	137			AA		2001	0315			2000- 1999-						-
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			0.650			<b>A</b> 5		2001	0410			2000-					20000	
	ΑU	2000	06/2	/3		AS		2001	0410			1999-						
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	IIC	2002	1/72	61		Δ1		2002	1010			2002-					20020	307
	0.5	2002	14/5	01							JΡ	1999-	2534	98		A	19990	907
											WO	2000-	JP56	65		Ά1	20000	823
	US	2004	0490	66		<b>A</b> 1		2004	0311		US	2003-	6562	28			20030	908
	-										JP	1999-	2534	98			19990	
											WO	2000-	JP56	65			20000	
											US	2002-	9150	0		A1	20020	307

OS CASREACT 134:223039

This document discloses the following : a method for industrially producing N-[N-[3-(3-methoxy-4-hydroxyphenyl)propyl]-L- $\alpha$ -aspartyl]-L-phenylalanine 1-Me ester which is useful as a sweetener, in particular, a process for producing the target compound in a high yield by the reductive

alkylation reaction of aspartame with 3-(3-methoxy-4-hydroxyphenyl) propional dehyde or its derivative; a method of effectively purifying the target compound contaminated with impurities invading thereinto at various production stages (involving methods other than the above-described reductive alkylation), more particularly, a method of separating the target compound in the form of highly pure crystals; the crystals;

sweeteners containing the same; and utilization thereof in various products which are to be sweetened.

RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN Novel aspartyl dipeptide ester derivatives as sweeteners ΤI 2000:15228 CAPLUS AN 132:63481 DN Novel aspartyl dipeptide ester derivatives as sweeteners ΤI Amino, Yusuke; Yuzawa, Kazuko; Takemoto, Tadashi; Nakamura, Ryoichiro IN Ajinomoto Co., Inc., Japan PΑ PCT Int. Appl., 28 pp. SO CODEN: PIXXD2

DT Patent

LA Japanese

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FAN.		LENT 1	NO.					DATE			APF	PLI:	CAT	ION 1	NO.			DATE	
ΡI	~ ₩O	2000	0005	<b>-</b>		 A1		2000	0106		WO	19	99-	 JР30.	 50			19990	607
1.1	,,,	W:			AM.						ВС	3.	BR,	BY,	CA,	CH,	CN	, CU,	CZ,
			DE.	DK.	EE.	ES.	FI.	GB,	GD,	GE,	GH	Í,	GM,	HR,	HU,	ID,	${ t IL}$	, IN,	IS,
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			TM,	TR,	TT,	UA,	ŪĠ,	US,	UZ,	VN,	ΥU	J,	ZA,	ZW,	AM,	ΑZ,	BY	, KG,	ΚZ,
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			CI,	CM,	GΑ,	GN,	GW,	ML,	MR,	NE,									
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											JP	19	98-	1802	04		A	19980	626
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											JP	19	98-	1807	04		A M	19980	
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														JP30				19990	
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	US	6630	191			B1		2003	1007					7361				20001 19980	
														1802				19980	
											WO	19	フフフー	JP30	50		ΗT	エフフフし	100/

Α 20001222 NO 2000006627 20010212 NO 2000-6627 A 19980626 JP 1998-180204 W 19990607 WO 1999-JP3050 MARPAT 132:63481 The Markush structure of the aspartyl dipeptide ester derivs. (including salts thereof) are given, and the example is N-[N-[3-(3-hydroxy-4methoxyphenyl) propyl] -L- $\alpha$ -aspartyl] -L- $(\alpha$ -methyl) phenylalanine 1-Me ester. These compds. are low-calorie sweeteners and are sweeter than conventional ones.

THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 16

OS

AΒ

TW 530066

В

20030501

ALL CITATIONS AVAILABLE IN THE RE FORMAT ANSWER 12 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN L10Preparation of aspartyl dipeptide ester derivatives as sweeteners TΙ 1999:672857 CAPLUS AN131:272186 DN Preparation of aspartyl dipeptide ester derivatives as sweeteners TΙ Amino, Yusuke; Yuzawa, Kazuko; Takemoto, Tadashi; Nakamura, Ryoichiro INAjinomoto Co., Inc., Japan PA PCT Int. Appl., 36 pp. SO CODEN: PIXXD2 DT Patent LA Japanese FAN.CNT 1 KIND DATE APPLICATION NO. PATENT NO. \_\_\_\_\_ \_\_\_\_\_\_\_ \_ - - -WO 1999-JP1210 19990311 19991021 A1 PΙ WO 9952937 W: AU, BR, BY, CA, CN, CZ, HU, IL, IN, JP, KR, MX, NO, NZ, PL, RO, RU, SK, TR, UA, US, VN RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG JP 1998-97701 A 19980409 A 19990217 JP 1999-38190 CA 1999-2327938 19990311 19991021 CA 2327938 AAA 19980409 JP 1998-97701 JP 1999-38190 A 19990217 WO 1999-JP1210 W 19990311 19990311 AU 1999-41184 AU 9941184 A1 19991101 В2 20021010 AU 753110 JP 1998-97701 A 19980409 JP 1999-38190 A 19990217 W 19990311 WO 1999-JP1210 20001226 BR 1999-9542 19990311 BR 9909542 Α JP 1998-97701 A 19980409 JP 1999-38190 A 19990217 WO 1999-JP1210 W 19990311 19990311 - A1 20010124 EP 1999-932431 EP 1070726 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, RO A 19980409 JP 1998-97701 A 19990217 JP 1999-38190 W 19990311 WO 1999-JP1210 TR 2000-200002929 19990311 TR 200002929 T2 20010321 A 19980409 JP 1998-97701 A 19990217 JP 1999-38190 19990311 RU 2179979 C1 20020227 RU 2000-128012 A 19980409 JP 1998-97701 A 19990217 JP 1999-38190 W 19990311 WO 1999-JP1210 19990311 20021126 NZ 1999-507938 NZ 507938 A 19980409 JP 1998-97701

A 19990217

W 19990311

19990317

JP 1999-38190 WO 1999-JP1210

TW 1999-88104155

JP 1998-97701 A 19980409

			JP 1999-38190	Α	19990217
ZA 9902566	A	19991012	ZA 1999-2566		19990407
			JP 1998-97701	Α	19980409
NO 2000004979	A	20001107	NO 2000-4979		20001003
			JP 1998-97701	Α	19980409
			JP 1999-38190	Α	19990217
			WO 1999-JP1210	W	19990311
US 6548096	B1	20030415	US 2000-684940		20001010
			JP 1998-97701	Α	19980409
			JP 1999-38190	Α	19990217
			WO 1999-JP1210	A1	19990311

OS MARPAT 131:272186

AB Novel aspartyl dipeptide ester derivs. (including those in the form of a salt) having an excellent sweetening effect and usable as sweeteners such as N-[N-[3-(3-methyl-4-hydroxyphenyl)propyl]-L- $\alpha$ -aspartyl]-L-phenylalanine 1-Me ester and N-[N-[3-(3-hydroxy-4-methoxyphenyl)propyl]-L- $\alpha$ -aspartyl]-L-phenylalanine 1-Me ester (I) are prepared Thus, I was prepared from N-tert-butoxycarbonyl- $\beta$ -O-benzyl- $\alpha$ -L-aspartyl-L-phenylalanine Me ester and 3-benzyloxy-4-methoxycinnamaldehyde. I was 20,000-times sweeter than sucrose.

RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> logoff hold		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
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FULL ESTIMATED COST	35.64	414.84
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-8.40	-10.50

SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 07:05:13 ON 09 NOV 2004

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L3	3	"2001039357".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/09 09:20
L4	3	"9952937".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/09 09:20
L5	1	"4440667".PN.	USPAT	OR	OFF	2004/11/09 09:20
L6	1	"5055588".PN.	USPAT	OR	OFF	2004/11/09 09:20
L7	8	560/40.ccls. and (hydrogen and dimethylbutyraldehyde)	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L8	11	"5510508".URPN. and extract\$	USPAT	OR	OFF	2004/11/09 09:20
L9	11	560/40.ccls. and (reductive adj alkylation)	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L10	32	"5510508".URPN.	USPAT	OR	OFF	2004/11/09 09:20
L11	38	560/40.ccls. and methoxyphenyl	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L12	1	"5510508".PN.	USPAT	OR	OFF	2004/11/09 09:20
L13	59	hydroxyphenyl\$ and 560/40.ccls.	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L14	1	"5502238".PN.	USPAT	OR	OFF	2004/11/09 09:20
L15	309	560/40.ccls.	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L16	2	"9411391".pn.	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L17	8	coniferylaldehyde	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L18	2	("6548096").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20

L19	2	("6335461").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
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L21	2	("6649784").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L22	460580	extract\$	USPAT	OR	OFF	2004/11/09 09:20
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L27	40054	methoxyphenyl	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L28	220	hydroxyphenyl\$ and aspartame	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L29	5583	aspartame	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L30	60572	hydroxyphenyl\$	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L31	59	hydroxyphenyl\$ and 560/40.ccls.	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L32	460580	extract\$	USPAT	OR	OFF	2004/11/09 09:20
L33	83	hydrogen and dimethylbutyraldehyde	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20

			HCDAT	00	OFF	2004/11/00 00:20
L34	106	dimethylbutyraldehyde	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L35	745748	hydrogen	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L36	3225	reductive adj alkylation	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L37	40054	methoxyphenyl	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L38	220	hydroxyphenyl\$ and aspartame	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L39	5583	aspartame	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L40	60572	hydroxyphenyl\$	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L41	59	hydroxyphenyl\$ and 560/40.ccls.	USPAT; EPO; JPO; DERWENT	OR ·	OFF	2004/11/09 09:20
L42	1	"5480668".PN.	USPAT	OR	OFF	2004/11/09 09:20
L43	1	"4440667".PN.	USPAT	OR	OFF	2004/11/09 09:20
L44	1	"5055588".PN.	USPAT	OR	OFF	2004/11/09 09:20
L45	1	"5510508".PN.	USPAT	OR	OFF	2004/11/09 09:20
L46	1	"5502238".PN.	USPAT	OR	OFF	2004/11/09 09:20
L47	2	"20020147361".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/09 09:20
L48	3	"2001039357".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/09 09:20
L49	3	"9952937".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/09 09:20
L50	8	560/40.ccls. and (hydrogen and dimethylbutyraldehyde)	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L51	11	"5510508".URPN. and extract\$	USPAT	OŘ	OFF	2004/11/09 09:20
L52	. 11	560/40.ccls. and (reductive adj alkylation)	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20

L53	32	"5510508".URPN.	USPAT	OR	OFF	2004/11/09 09:20
L54	38	560/40.ccls. and methoxyphenyl	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L55	59	hydroxyphenyl\$ and 560/40.ccls.	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L56	2	"9411391".pn.	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L57	8	coniferylaldehyde	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L58	2	("6548096").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L59	2	("6335461").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L60	2	("6630191").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L61	2	("6649784").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L62	309	560/40.ccls.	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L63	2	("6548096").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L64	1	"6794531".PN.	USPAT	OR	OFF	2004/11/09 09:20
L65	460580	extract\$	USPAT	OR	OFF	2004/11/09 09:20
L66	83	hydrogen and dimethylbutyraldehyde	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L67	106	dimethylbutyraldehyde	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20

L68	745748	hydrogen	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L69	3225	reductive adj alkylation	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L70	40054	methoxyphenyl	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L71	220	hydroxyphenyl\$ and aspartame	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L72	5583	aspartame	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L73	60572	hydroxyphenyl\$	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L74	59	hydroxyphenyl\$ and 560/40.ccls.	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L75	460580	extract\$	USPAT	OR	OFF	2004/11/09 09:20
L76	83	hydrogen and dimethylbutyraldehyde	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L77	106	dimethylbutyraldehyde	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L78	745748	hydrogen	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L79	3225	reductive adj alkylation	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L80	40054	methoxyphenyl	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L81	220	hydroxyphenyl\$ and aspartame	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L82	5583	aspartame	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L83	60572	hydroxyphenyl\$	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L84	59	hydroxyphenyl\$ and 560/40.ccls.	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20

L85	1	"5480668".PN.	USPAT	OR	OFF	2004/11/09 09:20
L86	1	"4440667".PN.	USPAT	OR	OFF	2004/11/09 09:20
L87	1	"5055588".PN.	USPAT	OR	OFF	2004/11/09 09:20
L88	1	"5510508".PN.	USPAT	OR	OFF	2004/11/09 09:20
L89	1	"5502238".PN.	USPAT	OR	OFF	2004/11/09 09:20
L90	1	"5480668".PN.	USPAT	OR	OFF	2004/11/09 09:20
L91	1	"4440667".PN.	USPAT	OR	OFF	2004/11/09 09:20
L92	. 1	"5055588".PN.	USPAT	OR	OFF	2004/11/09 09:20
L93	1	"5510508".PN.	USPAT	OR	OFF	2004/11/09 09:20
L94	. 1	"5502238".PN.	USPAT	OR	OFF	2004/11/09 09:20
L95	2	"20020147361".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/09 09:20
L96	3	"2001039357".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/09 09:20
L97	3	"9952937".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/09 09:20
L98	8	560/40.ccls. and (hydrogen and dimethylbutyraldehyde)	USPAT; EPO; JPO; DERWENT	OR .	OFF	2004/11/09 09:20
L99	11	"5510508".URPN. and extract\$	USPAT	OR	OFF	2004/11/09 09:20
L100	11	560/40.ccls. and (reductive adj alkylation)	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L101	32	"5510508".URPN.	USPAT	OR	OFF	2004/11/09 09:20
L102	38	560/40.ccls. and methoxyphenyl	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L103	59	hydroxyphenyl\$ and 560/40.ccls.	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L104	2	"9411391".pn.	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L105	8	coniferylaldehyde	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20

L106	2	("6548096").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L107	2	("6335461").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L108	2	("6630191").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L109	2	("6649784").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L110	2	"20020147361".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/09 09:20
L111	3	"2001039357".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/09 09:20
L112	3	"9952937".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/09 09:20
L113	8	560/40.ccls. and (hydrogen and dimethylbutyraldehyde)	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L114	11	"5510508".URPN. and extract\$	USPAT	OR	OFF	2004/11/09 09:20
L115	11	560/40.ccls. and (reductive adj alkylation)	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L116	32	"5510508".URPN.	USPAT	OR	OFF	2004/11/09 09:20
L117	38	560/40.ccls. and methoxyphenyl	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L118	59	hydroxyphenyl\$ and 560/40.ccls.	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20
L119	2	"9411391".pn.	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20

L120	8	coniferylaldehyde	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20	
L121	2	("6548096").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20	
L122	2	("6335461").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20	
L123	2	("6630191").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20	
L124	2	("6649784").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20	
L125	2	("6548096").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20	
L126	309	560/40.ccls.	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20	
L127	309	560/40.ccls.	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/11/09 09:20	

	Туре	L #	Hits	Search Text	DBs	Time Stamp	Comments
1	BRS	L22	460580	extract\$	USPAT	2004/11/09 09:20	
2	BRS	L23	83	hydrogen and dimethylbutyraldehyde	USPAT; EPO; JPO; DERWEN T	2004/11/09 09:20	
3	BRS	L24	106	dimethylbutyraldehyde		2004/11/09 09:20	
4	BRS	L25	745748	hydrogen		2004/11/09 09:20	
5	BRS	L26	3225	reductive adj alkylation	USPAT; EPO; JPO; DERWEN T	2004/11/09 09:20	
6	BRS	L27	40054	methoxyphenyl	USPAT; EPO; JPO; DERWEN T	2004/11/09 09:20	3
7	BRS	L28	220	hydroxyphenyl\$ and aspartame	USPAT; EPO; JPO; DERWEN	2004/11/09 09:20	
8	BRS	L29	5583	aspartame	USPAT; EPO; JPO; DERWEN	2004/11/09 09:20	
9	BRS	L30	60572	hydroxyphenyl\$	USPAT; EPO; JPO; DERWEN T	2004/11/09 09:20	

10	BRS	L31	59	hydroxyphenyl\$ and 560/40.ccls.	USPAT; EPO; JPO; DERWEN T	2004/11/09 09:20	·
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	Туре	L #	Hits	Search Text	DBs	Time Stamp	Comments
11	BRS	L32	460580	extract\$		2004/11/09 09:20	
12	BRS	L33	83	hydrogen and dimethylbutyraldehyde		2004/11/09 09:20	
13	BRS	L34	106	dimethylbutyraldehyde	USPAT; EPO; JPO; DERWEN	2004/11/09 09:20	
14	BRS	L35	745748	hydrogen	USPAT; EPO; JPO; DERWEN T	2004/11/09 09:20	
15	BRS	L36	3225	reductive adj alkylation	USPAT; EPO; JPO; DERWEN T	2004/11/09 09:20	
16	BRS	L37	40054	methoxyphenyl	USPAT; EPO; JPO; DERWEN T	2004/11/09 09:20	
17	BRS	L38	220	hydroxyphenyl\$ and aspartame	USPAT; EPO; JPO; DERWEN T	2004/11/09 09:20	
18	BRS	L39	5583	aspartame	USPAT; EPO; JPO; DERWEN	2004/11/09 09:20	
19	BRS	L40	60572	hydroxyphenyl\$	USPAT; EPO; JPO; DERWEN	2004/11/09 09:20	

20	BRS	L41	59	hydroxyphenyl\$ and	USPAT; EPO; JPO; DERWEN T	2004/11/09 09:20	
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	Туре	L #	Hits	Search Text	DBs	Time Stamp	Comments
21	BRS	L65	460580	extract\$	HIS DATE	2004/11/09 09:20	
22	BRS	L66	83	hydrogen and dimethylbutyraldehyde		2004/11/09 09:20	
23	BRS	L67	106	dimethylbutyraldehyde	1.10()+	2004/11/09 09:20	
24	BRS	L68	745748	hydrogen	1.110(1)	2004/11/09 09:20	
25	BRS	L69	3225	reductive adj alkylation	USPAT; EPO; JPO; DERWEN T	2004/11/09 09:20	
26	BRS	L70	40054	methoxyphenyl	USPAT; EPO; JPO; DERWEN T	2004/11/09 09:20	
27	BRS	L71	220	hydroxyphenyl\$ and aspartame	USPAT; EPO; JPO; DERWEN T	2004/11/09 09:20	
28	BRS	L72	5583	aspartame	USPAT; EPO; JPO; DERWEN T	2004/11/09 09:20	
29	BRS	L73	60572	hydroxyphenyl\$	USPAT; EPO; JPO; DERWEN T	2004/11/09 09:20	

30	BRS	L74	59	hydroxyphenyl\$ and	USPAT; EPO; JPO; DERWEN T	2004/11/09 09:20	
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	Туре	L #	Hits	Search Text	DBs	Time Stamp	Comments
31	BRS	L75	460580	extract\$		2004/11/09 09:20	
32	BRS	L76	83	hydrogen and dimethylbutyraldehyde	USPAT; EPO; JPO; DERWEN T	2004/11/09 09:20	
33	BRS	L77	106	dimethylbutyraldehyde	USPAT; EPO; JPO; DERWEN T	2004/11/09 09:20	
34	BRS	L78	745748	hydrogen	USPAT; EPO; JPO; DERWEN T	2004/11/09 09:20	
35	BRS	L79	3225	reductive adj alkylation	USPAT; EPO; JPO; DERWEN T	2004/11/09 09:20	
36	BRS	L80	40054	methoxyphenyl	USPAT; EPO; JPO; DERWEN T	2004/11/09 09:20	
37	BRS	L81	220	hydroxyphenyl\$ and aspartame	USPAT; EPO; JPO; DERWEN T	2004/11/09 09:20	
38	BRS	L82	5583	aspartame	USPAT; EPO; JPO; DERWEN T	2004/11/09 09:20	
39	BRS	L83	60572	hydroxyphenyl\$	USPAT; EPO; JPO; DERWEN	2004/11/09	

40	BRS	L84		hydroxyphenyl\$ and	USPAT; EPO; JPO; DERWEN T	2004/11/09 09:20	
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	Туре	L #	Hits	Search Text	DBs	Time Stamp	Comments
41	BRS	L1	1	"5480668".PN.		2004/11/09 09:20	
42	BRS	L5	1	"4440667".PN.	HIC DATE	2004/11/09 09:20	
43	BRS	L6	1	"5055588".PN.	III C D A T	2004/11/09 09:20	
44	BRS	L12	1	"5510508".PN.	ILIC DATE	2004/11/09 09:20	
 45	BRS	L14	1	"5502238".PN.		2004/11/09 09:20	
46	BRS	L42	1	"5480668".PN.	HIC DATE	2004/11/09 09:20	
47	BRS	L43	1	"4440667".PN.	USPAT	2004/11/09 09:20	
48	BRS	L44	1	"5055588".PN.	USPAT	2004/11/09 09:20	
49	BRS	L45	1	"5510508".PN.	USPAT	2004/11/09 09:20	
50	BRS	L46	1	"5502238".PN.	USPAT	2004/11/09 09:20	
51	BRS	L64	1	"6794531".PN.	USPAT	2004/11/09 09:20	
52	BRS	L85	1	"5480668".PN.	USPAT	2004/11/09 09:20	
53	BRS	L86	1	"4440667".PN.	USPAT	2004/11/09 09:20	
54	BRS	L87	1	"5055588".PN.	USPAT	2004/11/09 09:20	
55	BRS	L88	1	"5510508".PN.	USPAT	2004/11/09 09:20	
56	BRS	L89	1	"5502238".PN.	USPAT	2004/11/09 09:20	
57	BRS	L90	1	"5480668".PN.	USPAT	2004/11/09 09:20	
58	BRS	L91	1	"4440667".PN.	USPAT	2004/11/09 09:20	
59	BRS	L92	1	"5055588".PN.	USPAT	2004/11/09 09:20	
60	BRS	L93	1	"5510508".PN.	USPAT	2004/11/09 09:20	
61	BRS	L94	1	"5502238".PN.	USPAT	2004/11/09 09:20	
62	BRS	L2	2	"20020147361".pn.	US- PGPUB; USPAT; EPO; JPO; DERWEN	2004/11/09 09:20	

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	Туре	L #	Hits	Search Text	DBs	Time Stamp	Comments
63	BRS	L3	3	"2001039357".pn.	IL DO .	2004/11/09 09:20	
64	BRS	L4	3	"9952937".pn.	US- PGPUB; USPAT; EPO; JPO; DERWEN	2004/11/09 09:20	,
65	BRS	<b>L</b> 7	8	560/40.ccls. and (hydrogen and dimethylbutyraldehyde)	USPAT; EPO; JPO; DERWEN	2004/11/09 09:20	
66	BRS	L8	11	"5510508".URPN. and extract\$	USPAT	2004/11/09 09:20	
67	BRS	L9	11	560/40.ccls. and (reductive adj alkylation)	USPAT; EPO; JPO; DERWEN	2004/11/09 09:20	
68	BRS	L10	32	"5510508".URPN.	USPAT	2004/11/09 09:20	
69	BRS	L11	38	560/40.ccls. and methoxyphenyl	USPAT; EPO; JPO; DERWEN	2004/11/09 09:20	
70	BRS	L13	59	hydroxyphenyl\$ and 560/40.ccls.	USPAT; EPO; JPO; DERWEN	2004/11/09 09:20	
71	BRS	L16	2	"9411391".pn.	USPAT; EPO; JPO; DERWEN T	2004/11/09 09:20	

72	BRS	L17	8	coniferylaldehyde	USPAT; EPO; JPO; DERWEN T	2004/11/09 09:20	
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	Туре	L #	Hits	Search Text	DBs	Time Stamp	Comments
73	IS&R	L18	2	("6548096").PN.		2004/11/09 09:20	
74	IS&R	L19	2	("6335461").PN.		2004/11/09 09:20	
75	IS&R	L20	2	("6630191").PN.		2004/11/09 09:20	
76	IS&R	L21	2	("6649784").PN.	US- PGPUB; USPAT; USOCR; EPO; JPO; DERWEN	2004/11/09	
77	BRS	L47	2	"20020147361".pn.	US- PGPUB; USPAT; EPO; JPO; DERWEN	2004/11/09 09:20	. ,

78	BRS	L48	3	"2001039357".pn.	E . E	JS- PGPUB; JSPAT; EPO; JPO; DERWEN	2004/11/09 09:20	
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	Туре	L #	Hits	Search Text	DBs	Time Stamp	Comments
79	BRS	L49	3	"9952937".pn.	US- PGPUB; USPAT; EPO; JPO; DERWEN	2004/11/09 09:20	
80	BRS	L50	8	560/40.ccls. and (hydrogen and dimethylbutyraldehyde)	USPAT; EPO; JPO; DERWEN	2004/11/09 09:20	
81	BRS	L51	11	"5510508".URPN. and extract\$	USPAT	2004/11/09 09:20	
82	BRS	L52	11	560/40.ccls. and (reductive adj alkylation)	USPAT; EPO; JPO; DERWEN	2004/11/09	
83	BRS	L53	32	"5510508".URPN.	USPAT	2004/11/09 09:20	
84	BRS	L54	38	560/40.ccls. and methoxyphenyl	USPAT; EPO; JPO; DERWEN T	2004/11/09	
85	BRS	L55	59	hydroxyphenyl\$ and 560/40.ccls.	USPAT; EPO; JPO; DERWEN T	2004/11/09 09:20	
86	BRS	L56	2	"9411391".pn.	USPAT; EPO; JPO; DERWEN T	2004/11/09 09:20	
87	BRS	L57	8	coniferylaldehyde	USPAT; EPO; JPO; DERWEN T	2004/11/09 09:20	

	Error	Definition	Err ors
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	Туре	L #	Hits	Search Text	DBs	Time Stamp	Comments
88	IS&R	L58	2	("6548096").PN.		2004/11/09 09:20	
89	IS&R	L59	2	("6335461").PN.		2004/11/09 09:20	
90	IS&R	L60	2	("6630191").PN.		2004/11/09 09:20	
91	IS&R	L61	2	("6649784").PN.	US- PGPUB; USPAT; USOCR; EPO; JPO; DERWEN	2004/11/09 09:20	
92	IS&R	L63	2	("6548096").PN.	US- PGPUB; USPAT; EPO; JPO; DERWEN T	2004/11/09	

93	BRS	L95	2	"20020147361".pn.		2004/11/09 09:20	
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	Error	Definition	Err ors
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	Туре	L #	Hits	Search Text	DBs	Time Stamp	Comments
94	BRS	L96	3	"2001039357".pn.	י ממישו	2004/11/09 09:20	
95	BRS	L97	3	"9952937".pn.	US- PGPUB; USPAT; EPO; JPO; DERWEN	2004/11/09 09:20	
96	BRS	L98	8	560/40.ccls. and (hydrogen and dimethylbutyraldehyde)	USPAT; EPO; JPO; DERWEN	2004/11/09 09:20	
97	BRS	L99	11	"5510508" URPN. and extract\$	USPAT	2004/11/09 09:20	
98	BRS	L100	11	560/40.ccls. and (reductive adj alkylation)	USPAT; EPO; JPO; DERWEN	2004/11/09 09:20	
99	BRS	L101	32	"5510508".URPN.	USPAT	2004/11/09 09:20	
100	BRS	L102	38	560/40.ccls. and methoxyphenyl	USPAT; EPO; JPO; DERWEN T	2004/11/09 09:20	
101	BRS	L103	59	hydroxyphenyl\$ and 560/40.ccls.	USPAT; EPO; JPO; DERWEN T	2004/11/09 09:20	
102	BRS	L104	2	"9411391".pn.	USPAT; EPO; JPO; DERWEN T	2004/11/09 09:20	

103 BRS L105 8 coniferylaldehyde	USPAT; EPO; JPO; DERWEN T	
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	Туре	L#	Hits	Search Text	DBs	Time Stamp	Comments
104	IS&R	L106	2	("6548096").PN.		2004/11/09 09:20	
105	IS&R	L107	2	("6335461").PN.		2004/11/09 09:20	
106	IS&R	L108	2	("6630191").PN.	US- PGPUB; USPAT; USOCR; EPO; JPO; DERWEN	2004/11/09 09:20	
107	IS&R	L109	2	("6649784").PN.	US- PGPUB; USPAT; USOCR; EPO; JPO; DERWEN	2004/11/09 09:20	
108	BRS	L110	2	"20020147361".pn.	US- PGPUB; USPAT; EPO; JPO; DERWEN	2004/11/09 09:20	

109	BRS	L111	3	"2001039357".pn.		2004/11/09 09:20		
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	Туре	L #	Hits	Search Text	DBs	Time Stamp	Comments
110	BRS	L112	3	"9952937".pn.	US- PGPUB; USPAT; EPO; JPO; DERWEN	2004/11/09 09:20	
111	BRS	L113	8	560/40.ccls. and (hydrogen and dimethylbutyraldehyde)	USPAT; EPO; JPO; DERWEN T	2004/11/09 09:20	
112	BRS	L114	11	"5510508".URPN. and extract\$	USPAT	2004/11/09 09:20	
113	BRS	L115	11	560/40.ccls. and (reductive adj alkylation)	USPAT; EPO; JPO; DERWEN	2004/11/09 09:20	
114	BRS	L116	32	"5510508".URPN.	USPAT	2004/11/09 09:20	
115	BRS	L117	38	560/40.ccls. and methoxyphenyl	USPAT; EPO; JPO; DERWEN	2004/11/09 09:20	
116	BRS	L118	59	hydroxyphenyl\$ and 560/40.ccls.	USPAT; EPO; JPO; DERWEN	2004/11/09 09:20	
117	BRS	L119	2	"9411391".pn.	USPAT; EPO; JPO; DERWEN	2004/11/09 09:20	
118	BRS	L120	8	coniferylaldehyde	USPAT; EPO; JPO; DERWEN T	2004/11/09 09:20	·

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	Туре	L #	Hits	Search Text	DBs	Time Stamp	Comments
119	IS&R	L121	2	("6548096").PN.		2004/11/09 09:20	
120	IS&R	L122	2	("6335461").PN.		2004/11/09 09:20	
121	IŚ&R	L123	2	("6630191").PN(.		2004/11/09 09:20	
122	IS&R	L124	2	("6649784").PN.	US- PGPUB; USPAT; USOCR; EPO; JPO; DERWEN	2004/11/09 09:20	
123	IS&R	L125	2	("6548096").PN.	US- PGPUB; USPAT; EPO; JPO; DERWEN	2004/11/09 09:20	

124	BRS	L15	309	560/40.ccls.	USPAT; EPO; JPO; DERWEN	2004/11/09 09:20	
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	Туре	L#	Hits	Search Text	DBs	Time Stamp	Comments
125	BRS	L62	309	560/40.ccls.		2004/11/09 09:20	
126	BRS	L126	309	560/40.ccls.	1 1 D( ) •	2004/11/09 09:20	
127	BRS	L127	309	560/40.ccls.	LID() •	2004/11/09 09:20	

	Error Definition	Err ors
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